	Туре	L#	Hits	Search Text	DBs	Time Stamp
1	BRS	L2	15403	aluminum same ((AlN or AlON) or (aluminum adj nitride) or (aluminum adj oxynitride))	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/01/25 15:05
2	BRS	L3	1663	2 same dielectric	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/01/25 15:05
3	BRS	L4	270		USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/01/25 15:13
4	IS&R	L6	3625	(438/396).CCLS.	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/01/25 15:59
5	BRS	L7	28	6 and 2	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/01/25 16:04

_	Туре	L#	Hits	Search Text	DBs	Time Stamp
6	IS&R	L8	83	(438/768).CCLS.	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/01/25 16:08
7	BRS	L16	4	2 and 8	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/01/25 16:09
8	BRS	L17		(AlN or AlON or (aluminum adj3 nitride) or (aluminum adj3 oxynitride)) with (dielectric)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/01/25 16:10
9	BRS	L18	288	17 and capacitor	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/01/25 16:11
10	BRS	L19	108	18 not 4	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2003/01/25 16:11

DERWENT-ACC-NO: 2000-249412

DERWENT-WEEK: 200104

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TITLE: DRAM <u>capacitor</u> manufacturing method involves

 $\langle 1 \rangle$

forming compound

dielectric film comprising alumina layer and aluminum

nitride layer, between

upper and lower electrodes

INVENTOR: CHOI, S J; KIM, Y G ; LEE, J H ; LEE, S M

PATENT-ASSIGNEE: SAMSUNG ELECTRONICS CO LTD[SMSU]

PRIORITY-DATA: 1998KR-0032638 (August 12, 1998)

PATENT-FAMILY:

PUB-DATE LANGUAGE

PAGES MAIN-IPC

JP 2000058777 February 25, 2000 N/A

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Α

APPLICATION-DATA:

PUB-NO APPL-DESCRIPTOR APPL-NO

APPL-DATE

JP2000058777A N/A 1998JP-0363259

December 21, 1998

KR2000013654A N/A 1998KR-0032638

August 12, 1998

INT-CL (IPC): H01L021/8242; H01L027/108

ABSTRACTED-PUB-NO: JP2000058777A

BASIC-ABSTRACT: NOVELTY - A compound dielectric film (115)

comprising alumina

layer and aluminum nitride layer, is formed between

patterned polysilicon lower

electrode (102) and upper electrode (105) by atomic layer deposition (ALD).

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also

included for DRAM capacitor.

USE - For manufacture of DRAM capacitor.

ADVANTAGE - Since polysilicon electrodes are provided, permutation caused by electrodes does not generate chemical reaction. Since dielectric film has high dielectric constant, favorable oxidation property and excellent insulating property are obtained.

DESCRIPTION OF DRAWING(S) - The figure shows the sectional view of DRAM capacitor.

Polysilicon lower electrode 102

Polysilicon upper electrode 105

Compound dielectric film 115

CHOSEN-DRAWING: Dwg.3/13

TITLE-TERMS:

DRAM <u>CAPACITOR</u> MANUFACTURE METHOD FORMING COMPOUND DIELECTRIC FILM COMPRISE ALUMINA LAYER NITRIDE LAYER UPPER LOWER ELECTRODE

DERWENT-CLASS: LO3 U11 U13 U14

CPI-CODES: L04-C14A;

EPI-CODES: U11-C18B5; U13-C04B1A; U14-A03B4;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2000-075843 Non-CPI Secondary Accession Numbers: N2000-186971